

WHAT IS CLAIMED IS:

1. An electro-optical apparatus, comprising:
an electro-optical device encased in a mounting case and having a substrate in which projection light from a light source is incident on an image display region, and
a mounting case including a plate disposed to face one surface of the electro-optical device and a cover to cover the electro-optical device, a portion of the cover abutting against the plate, the mounting case accommodating the electro-optical device by holding at least a portion of a peripheral region positioned at the periphery of the image display region of the electro-optical device with at least one of the plate and the cover,
the plate having a coefficient of linear expansion within a predetermined range on the basis of the coefficient of linear expansion of the substrate.
2. The electro-optical apparatus according to Claim 1,
the predetermined range being $\pm 5 \times 10^{-6} [^{\circ}\text{C}]$.
3. The electro-optical apparatus according to Claim 1,
the plate being made of an alloy containing at least iron and nickel.
4. The electro-optical apparatus according to Claim 1,
the plate being formed by press processing.
5. The electro-optical apparatus according to Claim 4,
the plate being annealed before the press processing.
6. The electro-optical apparatus according to Claim 1,
a light emitting surface of the plate being black.
7. The electro-optical apparatus according to Claim 1,
the substrate including a pair of substrates to hold an electro-optic material therebetween and at least one dustproof substrate provided in one of the pair of substrates on the surface not facing the electro-optic material.
8. A mounting case, comprising:
a plate disposed to face one surface of an electro-optical device having a substrate in which projection light from a light source is incident on an image display region, and
a cover to cover the electro-optical device, a portion of the cover abutting against the plate,

the mounting case accommodating the electro-optical device by holding at least a portion of the peripheral region positioned at the periphery of the image display region of the electro-optical device, and

the plate having a coefficient of linear expansion within a predetermined range on the basis of the coefficient of linear expansion of the substrate.

9. A method to manufacture a mounting case, including a plate disposed to face one surface of an electro-optical device in which projection light from a light source is incident on an image display region, and a cover to cover the electro-optical device, a portion of the cover abutting against the plate, the mounting case accommodating the electro-optical device by holding at least a portion of the peripheral region positioned at the periphery of the image display region of the electro-optical device, the method comprising:

heating an original plate to be used as the plate to a predetermined temperature or more, and

pressing the original plate after the annealing step.

10. A projection display apparatus, comprising:

the electro-optical apparatus according to Claim 1;

the light source;

an optical system to guide the projection light into the electro-optical device;

and

a projection optical system to project the light emitted from the electro-optical device.